

## REMARKS

Claims 1-26 are pending in the present application. Claims 1 and 21 were amended in this response. No new matter has been introduced as a result of the amendments.

Claims 1, 3-6, 8-12, 14-18, 20-21, 23-24 and 26 were rejected under 35 U.S.C. §102(e) as being anticipated by *Threadgill* (US Patent 6,272,341). Claims 2, 7, 13, 19, 22 and 25 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Threadgill et al.* (US Patent 6,272,341). Applicants respectfully traverse these rejections. Favorable reconsideration is requested.

Specifically, *Threadgill* fails to teach or suggest a “satellite comprising a plurality of antennas for receiving transmissions from geographically distinct cells, a plurality of demodulators for demodulating transmissions in particular frequency ranges, a switch matrix for connecting said antennas to said demodulators, and a payload processor for configuring said switch matrix to configure said satellite resources, wherein said resources comprise a plurality of channels for transmitting information to or from said satellite” as recited in claim 1, and similarly recited in independent claims 9, 15 and 21. Support for these features may be found in exemplary paragraphs [0039-41] of the present specification.

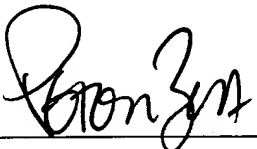
*Threadgill* teaches a network engineering/systems engineering (NE/SE) system, where the NE/SE performs the processes of comparing expected traffic loads with capability and availability of space and ground resources in the mobile satellite system, formulating tactical plans to maximize available resources of the satellite, and producing frequency plans for different geographical regions and defining circuit pools for different groups of users of the mobile earth terminals (METs) (see Abstract). The system disclosed in *Threadgill* is a “bent pipe” satellite relay system, where the satellite transponder performs signal amplification and frequency translation, but does not perform signal detection, decoding and protocol translation. The satellite of *Threadgill* is, essentially, independent of the signal format and transparent to the protocol suite (see col. 2, lines 27-53). In other words, the bent-pipe satellite acts essentially as a repeater in the sky, and simply receives and retransmits signals without performing any additional functions like multiplexing, switching or routing. All waveform processing intelligence, like data rate adjustment or interference mitigation, is performed by the ground station terminal equipment (col. 6, lines 27-45; col. 40, lines 12-48; col. 41, line 63 – col. 42, line

2; see claim 1). As such, none of the satellites in *Threadgill* are equipped with a plurality of antennas, demodulators, switch matrix or a payload processor to manage and process incoming requests. It follows that in the absence of such equipment, *Threadgill* cannot teach resource allocation that is also executed on the satellite ("wherein said plurality of system constraints comprises a number of active demodulators available in a satellite for a plurality of subbands and a configuration of a switch matrix in the satellite, said switch matrix being adapted to associate satellite antennas with active demodulators").

For at least these reasons, Applicants submit the rejection under 35 U.S.C. §102 is improper and should be withdrawn. Also, since claims 2, 7, 13, 19, 22 and 25 are dependent from their respective base claims discussed above, the rejection under 35 U.S.C. §103 is also improper and should be withdrawn.

As the reference and the other cited art fail to teach or suggest this limitation, Applicant submits that the rejections under 35 U.S.C. §102(e) and §103(a) are improper and should be withdrawn. In light of the above, Applicants respectfully submit that claims 1-26 are in condition for allowance, which is respectfully requested. The Applicants also enclose a petition for a two-month extension of time, along with a check in the amount of \$450.00. The Commissioner is authorized to charge and credit Deposit Account No. 02-1818 for any additional fees associated with the submission of this Response, including any time extension fees. Please reference docket number 115426-816.

Respectfully submitted,

BY  \_\_\_\_\_

Peter Zura  
Reg. No. 48,196  
Customer No.: 24573  
(312) 807-4208

Dated: September 7, 2005